CRITERIA HAVING FINDINGS OR OBSERVATIONS SUPPLEMENT TO THE FY 2000 ACSEP REPORT

Prepared by Aircraft Certification Service

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INTRODUCTION

The following tables provide the specific criteria data collected during FY 2000 ACSEP evaluations conducted at production approval holders. Tables 1 through 4 present data from all approval types combined. The remainder of the tables present data for the particular approval type specified. Note that there were no issues recorded for APIS holders.

Table 1. – Systemic Findings

	Table 1	- Systemic Fin	dings	
Criteria	Description	Number of Systemic Findings	Percent of Total Systemic Findings	Percent of Facilities
5Q3	Accord with process specifications	18	6%	6%
4Q1	Inspection methods and plans	15	5%	5%
10Q1	Initial and periodic evaluation of suppliers	14	5%	5%
4P9	Completed product/part identification	13	4%	4%
10Q10	Receiving inspection	13	4%	4%
11Q1	Control of nonconforming products	11	4%	4%
2E7	Design/Technical data document control	9	3%	3%
11Q2	Permanent identification of scrap material	9	3%	3%
15M1	Internal auditing program	8	3%	3%
4E1	Accord with FAA- approved design data	6	2%	2%
4Q3	Issuance of inspection stamps	6	2%	2%
7Q1	Approval/inspection of tools and gauges	6	2%	2%
2E2	Drawing control system	5	2%	2%
4M1	Operation within production limitations	5	2%	2%
4P4	Work instructions control manufacturing processes	5	2%	2%
4Q5	Inspection records	5	2%	2%
2E8	Major/minor design changes	4	1%	1%
4P2	Work instructions prepared	4	1%	1%
4P5	Work instruction revision approval	4	1%	1%
4Q2	Location of inspection stations	4	1%	1%
7Q12	Calibration records	4	1%	1%
10Q2	Use of approved suppliers	4	1%	1%
10Q8	Verification of raw material	4	1%	1%
1Q4	Quality manual	3	1%	1%

Criteria	Description	Number of Systemic Findings	Percent of Total Systemic Findings	Percent of Facilities
2C1	Minor design change approval	3	1%	1%
4Q10	Inspection marking	3	1%	1%
7Q3	Tool and gauge recall system	3	1%	1%
7Q6	Calibration and use in acceptable environment	3	1%	1%
7Q11	Control of production tooling	3	1%	1%
10Q5	Flow down of technical and quality requirements	3	1%	1%
11Q3	MRB established and operational	3	1%	1%
11Q4	Material review record generated	3	1%	1%
12Q5	Identification of age control products	3	1%	1%
15M2	Feed-back to higher level management	3	1%	1%
1Q5	Tags, forms, etc. defined	2	1%	1%
2E1	Design change approval	2	1%	1%
2E9	Technical data file	2	1%	1%
2C2	Major design change approval	2	1%	1%
2C4	Data submittal for TSO changes	2	1%	1%
4P1	Change approval	2	1%	1%
4P6	Familiarity with specifications	2	1%	1%
4Q12	Completion of all inspections and tests	2	1%	1%
5Q2	Required qualifications/approvals	2	1%	1%
6Q1	Statistical sampling inspection plans	2	1%	1%
7Q2	Instructions for acceptance tooling	2	1%	1%
7Q7	Accuracy of inspection/test equipment	2	1%	1%
7Q9	Control of special processing equipment	2	1%	1%

Criteria	Description	Number of Systemic Findings	Percent of Total Systemic Findings	Percent of Facilities
8E1	Test procedures/instructions established	2	1%	1%
9E2	Control of NDI processes & changes	2	1%	1%
9Q1	Operator qualifications	2	1%	1%
9Q3	NDI procedures/ specifications available and used	2	1%	1%
11Q7	Corrective action monitored	2	1%	1%
12Q1	Prevention of part damage/ deterioration	2	1%	1%
12Q2	Special environmental controls	2	1%	1%
17Q4	Mechanics/ repairmen directly in charge	2	1%	1%
1M5	Policy document review	1	0.3%	0.3%
1M6	Policies/ procedures availability	1	0.3%	0.3%
1E2	Engineering Manager identified	1	0.3%	0.3%
1Q3	Quality Assurance manager identified	1	0.3%	0.3%
2E6	Storage of design documents	1	0.3%	0.3%
3AE1	Software Configuration Management Plan	1	0.3%	0.3%
3BE1	Software Configuration Management Plan	1	0.3%	0.3%
3BE2	Change documentation and approval	1	0.3%	0.3%
3BE3	Software problem reporting	1	0.3%	0.3%
3BE4	Software security	1	0.3%	0.3%
3BQ1	Verification prior to use	1	0.3%	0.3%
4P3	Work instructions reflect tech data	1	0.3%	0.3%
4P7	Identification/ control of partially accepted parts	1	0.3%	0.3%
4Q8	Traceable components identified	1	0.3%	0.3%
5E1	All special processes in use identified	1	0.3%	0.3%

Criteria	Description	Number of Systemic	Percent of Total Systemic Findings	Percent of Facilities
		Findings		
5Q1	Equipment available and calibrated	1	0.3%	0.3%
5Q4	Records maintained	1	0.3%	0.3%
5Q5	Action on process out of control	1	0.3%	0.3%
7P1	Appropriate measuring devices used	1	0.3%	0.3%
7Q8	Use of personal gauges	1	0.3%	0.3%
7Q14	Identification of gauges	1	0.3%	0.3%
7Q18	Action on product measured by SOT gauge	1	0.3%	0.3%
8E2	Control of test procedure/instruction change	1	0.3%	0.3%
8E3	Approved flight checkoff form	1	0.3%	0.3%
8P1	Manufacturing review of test instructions	1	0.3%	0.3%
8Q5	Post-test teardown inspection and retest	1	0.3%	0.3%
8C1	Approval of flight test procedures	1	0.3%	0.3%
9Q2	Operators performing within authorized limits	1	0.3%	0.3%
9Q4	Tanks and solutions checked	1	0.3%	0.3%
10E1	Control of supplier design and changes	1	0.3%	0.3%
10Q6	Control of supplier design and changes	1	0.3%	0.3%
10Q7	Action on problem notification	1	0.3%	0.3%
10Q11	Segregation of non- certified parts	1	0.3%	0.3%
11Q5	Reinspection/ retest after rework/repair	1	0.3%	0.3%
11Q6	Corrective action required	1	0.3%	0.3%
12Q4	Segregation of product in storage	1	0.3%	0.3%
12Q8	Conforming products packaged and shipped	1	0.3%	0.3%

Criteria	Description	Number of Systemic Findings	Percent of Total Systemic Findings	Percent of Facilities
13C3	Cancellation of certifications for passed title	1	0.3%	0.3%
14S2	Record of service difficulties	1	0.3%	0.3%
14S5	Approval of service bulletins	1	0.3%	0.3%
14C3	Submittal of quality system data changes	1	0.3%	0.3%
14C4	Relocation of manufacturing facilities	1	0.3%	0.3%
17Q2	Operation within certificate privileges	1	0.3%	0.3%

Table 2. – Systemic Observations

Q 11	Table 2. – Systemic Observations				
Criteria	Description	Number of Systemic Observations	Percent of Total Systemic Observations	Percent of Facilities	
4Q5	Inspection records	9	6%	3%	
10Q1	Initial and periodic evaluation of suppliers	9	6%	3%	
7Q1	Approval/inspection of tools and gauges	6	4%	2%	
10Q2	Use of approved suppliers	6	4%	2%	
15M1	Internal auditing program	6	4%	2%	
2E2	Drawing control system	5	3%	2%	
4P4	Work instructions control manufacturing processes	5	3%	2%	
10Q8	Verification of raw material	5	3%	2%	
11Q1	Verification of raw material	5	3%	2%	
2E7	Design/Technical data document control	4	3%	1%	
4Q3	Issuance of inspection stamps	4	3%	1%	
10Q12	Records of receiving inspection	4	3%	1%	
1M5	Policy document review	3	2%	1%	
4Q1	Inspection methods and plans	3	2%	1%	
7Q3	Tool and gauge recall system	3	2%	1%	
7Q6	Calibration and use in acceptable environment	3	2%	1%	
7Q12	Calibration records	3	2%	1%	
10Q5	Flow down of technical and quality requirements	3	2%	1%	
12Q3	Storage of conforming parts	3	2%	1%	
12Q5	Identification of age control products	3	2%	1%	
1Q4	Quality manual	2	1%	1%	
4P2	Work instructions prepared	2	1%	1%	
4P9	Completed product/part identification	2	1%	1%	

Criteria	Description	Number of Systemic Observations	Percent of Total Systemic Observations	Percent of Facilities
4Q12	Completion of all inspections and tests	2	1%	1%
5Q3	Accord with process specifications	2	1%	1%
7Q2	Instructions for acceptance tooling	2	1%	1%
7Q14	Identification of gauges	2	1%	1%
10Q6	Control of supplier design and changes	2	1%	1%
10Q10	Receiving inspection	2	1%	1%
11Q2	Permanent identification of scrap material	2	1%	1%
11Q6	Corrective action required	2	1%	1%
1M1	Overall policy document	1	1%	0.3%
1Q2	Quality Assurance Manager identified	1	1%	0.3%
1Q3	Quality Assurance staff qualifications	1	1%	0.3%
1Q7	Record analysis	1	1%	0.3%
1S1	Service/Product support organization described	1	1%	0.3%
2E1	Design change approval	1	1%	0.3%
2E3	Technical data change approval	1	1%	0.3%
2E6	Storage of design documents	1	1%	0.3%
2C1	Minor design change approval	1	1%	0.3%
3AE3	Software problem reporting	1	1%	0.3%
3BE2	Change documentation and approval	1	1%	0.3%
4E1	Accord with FAA- approved design data	1	1%	0.3%
4P3	Work instructions reflect tech data	1	1%	0.3%
4P7	Identification/control of partially accepted parts	1	1%	0.3%
4Q9	Traceability to raw materials	1	1%	0.3%
5E1	All special processes in use identified	1	1%	0.3%

Criteria	Description	Number of Systemic Observations	Percent of Total Systemic Observations	Percent of Facilities
5Q2	Required qualifications/ approvals	1	1%	0.3%
7Q4	Traceability to national/international standards	1	1%	0.3%
7Q11	Control of production tooling	1	1%	0.3%
7Q19	Tool and gauge rework/ inspection	1	1%	0.3%
8E1	Test procedures/ instructions established	1	1%	0.3%
8E5	Flight safety program	1	1%	0.3%
9Q2	Operators performing within authorized limits	1	1%	0.3%
9Q9	Records of compliance	1	1%	0.3%
10Q4	Control of buyer- furnished material	1	1%	0.3%
10Q11	Segregation of non- certified parts	1	1%	0.3%
10C2	New suppliers/first articles	1	1%	0.3%
11Q3	MRB established and operational	1	1%	0.3%
11Q4	Material review record generated	1	1%	0.3%
11Q5	Reinspection/ retest after rework/repair	1	1%	0.3%
13E1	AD incorporation	1	1%	0.3%
14S3	Investigative/corrective action	1	1%	0.3%
15M2	Feedback to higher level management	1	1%	0.3%

Table 3. – Isolated Observations

a		solated Observat		D 4 6
Criteria	Description	Number of	Percent of Total	Percent of
		Isolated	Isolated	Facilities
502	A good with magaza	Observations 8	Observations	3%
5Q3	Accord with process	8	6%	3%
1101	specifications Control of	7	50/	20/
11Q1		/	5%	2%
701	nonconforming products	6	5 0/	20/
7Q1	Approval/inspection of	0	5%	2%
4P2	tools and gauges Work instructions	5	4%	2%
4P2		3	4%	2%
405	prepared Inspection records	5	4%	2%
4Q5	Inspection records	5	4%	
12Q5	Identification of age control products	3	4%	2%
4P9	1	4	3%	10/
4P9	Completed product/part identification	4	3%	1%
1002		4	3%	10/
10Q2	Use of approved suppliers	4	3%	1%
4P3	Work instructions reflect	3	2%	1%
413	tech data	3	270	1 70
7Q11	Control of production	3	2%	1%
/Q11	tooling	3	Δ%	1 %
105	<u> </u>	2	20/	10/
1Q5 2E7	Tags, forms, etc. defined	2 2	2% 2%	1% 1%
2E/	Design/Technical data document control	2	Δ%	1 %
4P4	Work instructions control	2	2%	1%
4P4		2	Δ%	1 %
4P6	manufacturing processes	2	2%	1%
420	Familiarity with	2	Δ%	1%
401	specifications	2	20/	10/
4Q1	Inspection methods and	2	2%	1%
402	plans	2	20/	10/
4Q3	Issuance of inspection	2	2%	1%
4012	stamps Completion of all	2	2%	1%
4Q12	Completion of all	2	Δ%	1 %
504	inspections and tests Records maintained	2	2%	10/
5Q4		2	2%	1% 1%
7Q3	Tool and gauge recall	<u> </u>	Δ%0	1 %
700	System Control of special	2	20/	1.0/
7Q9	Control of special	<u> </u>	2%	1%
7012	processing equipment	2	20/	10/
7Q12	Calibration records		2%	1%
7Q14	Identification of gauges	2 2	2%	1%
7Q16	Inaccurate tools and	2	2%	1%
	gauges identified			

Criteria	Description	Number of Isolated Observations	Percent of Total Isolated Observations	Percent of Facilities
8E1	Test procedures/ instructions established	2	2%	1%
10Q8	Verification of raw material	2	2%	1%
12Q2	Special environmental controls	2	2%	1%
12Q7	Control of product removal/issuance	2	2%	1%
15M1	Internal auditing program	2	2%	1%
1M5	Policy document review	1	1%	0.3%
1M6	Policies/ procedures availability	1	1%	0.3%
1Q2	Quality Assurance Manager identified	1	1%	0.3%
1Q3	Quality Assurance staff qualifications	1	1%	0.3%
1Q4	Quality manual	1	1%	0.3%
2E1	Design change approval	1	1%	0.3%
2E3	Technical data change approval	1	1%	0.3%
2E8	Major/minor design changes	1	1%	0.3%
2E9	Technical data file	1	1%	0.3%
2C1	Minor design change approval	1	1%	0.3%
3AE5	Software security	1	1%	0.3%
3BE2	Change documentation and approval	1	1%	0.3%
3BE4	Software security	1	1%	0.3%
4E1	Accord with FAA- approved design data	1	1%	0.3%
4E2	New/changed process test substantiation	1	1%	0.3%
4P1	Change approval	1	1%	0.3%
4P5	Work instruction revision approval	1	1%	0.3%
4P8	Traceability for split lots	1	1%	0.3%
4Q2	Location of inspection stations	1	1%	0.3%
4Q6	Cleaners, solvents, etc. identified	1	1%	0.3%
4Q10	Inspection marking	1	1%	0.3%

Criteria	Description	Number of	Percent of Total	Percent of
		Isolated	Isolated Observations	Facilities
502	Dagwingd	Observations		0.3%
5Q2	Required	1	1%	0.5%
(01	qualifications/approvals	1	10/	0.20/
6Q1	Statistical sampling	1	1%	0.3%
6011	inspection plans	1	10/	0.20/
6Q11	Additional inspection	1	1%	0.3%
0.52	during corrective action	1	10/	0.20/
8E2	Control of test procedure/	1	1%	0.3%
0.52	instruction change	1	10/	0.20/
8E3	Approved flight checkoff	1	1%	0.3%
0.01	form	4	4.07	0.20/
9Q1	Operator qualifications	1	1%	0.3%
9Q2	Operators performing	1	1%	0.3%
	within authorized limits			
9Q3	NDI procedures/	1	1%	0.3%
	specifications available			
	and used			
10Q1	Initial and periodic	1	1%	0.3%
	evaluation of suppliers			
10Q9	Verification of shelf-life	1	1%	0.3%
	materials			
10Q10	Receiving inspection	1	1%	0.3%
10Q12	Records of receiving	1	1%	0.3%
	inspection			
11Q2	Permanent identification	1	1%	0.3%
	of scrap material			
11Q3	MRB established and	1	1%	0.3%
	operational			
11Q4	Material review record	1	1%	0.3%
	generated			
11 Q 7	Corrective action	1	1%	0.3%
	monitored			
12Q4	Segregation of product in	1	1%	0.3%
	storage			
14S2	Record of service	1	1%	0.3%
	difficulties			
14C3	Submittal of quality	1	1%	0.3%
	system data changes			
16Q3	Export airworthiness	1	1%	0.3%
	approvals obtained			
17Q2	Operation within	1	1%	0.3%
	certificate privileges			

Table 4. – CFR-Based Observations

Table 4. – CFR-Based Observations				
Criteria	Description	Number of CFR-Based Observations	Percent of Total CFR-Based Observations	Percent of Facilities
2E2	Drawing control system	4	10%	1%
4E1	Accord with FAA- approved design data	4	10%	1%
10Q1	Initial and periodic evaluation of suppliers	3	7%	1%
1Q6	Record retention schedule	2	5%	1%
2E1	Design change approval	2	5%	1%
2E4	AD incorporation into design	2	5%	1%
2E8	Major/minor design changes	2	5%	1%
2C1	Minor design change approval	2	5%	1%
6Q1	Statistical sampling inspection plans	2	5%	1%
8E1	Test procedures/ instructions established	2	5%	1%
1Q1	Quality organization described	1	2%	0.3%
1Q4	Quality manual	1	2%	0.3%
1C1	Notification organization described	1	2%	0.3%
2E5	Changes to instructions for Continued Airworthiness	1	2%	0.3%
2S2	Distribution of Inst. For Continued Airworthiness changes	1	2%	0.3%
3BE2	Change documentation and approval	1	2%	0.3%
4P9	Completed product/part identification	1	2%	0.3%
4Q2	Location of inspection stations	1	2%	0.3%
5E1	All special processes in use identified	1	2%	0.3%
6Q5	SPC method established	1	2%	0.3%
8E3	Approved flight checkoff form	1	2%	0.3%
10Q5	Flow down of technical and quality requirements	1	2%	0.3%

Criteria	Description	Number of CFR-Based	Percent of Total CFR-Based	Percent of Facilities
		Observations	Observations	
10Q8	Verification of raw material	1	2%	0.3%
10C1	Delegation of major inspection authority	1	2%	0.3%
11Q6	Corrective action required	1	2%	0.3%
13E1	AD incorporation	1	2%	0.3%
14C1	Failure reporting	1	2%	0.3%

Table 5. – Systemic Findings at TSO Facilities

Table 5. – Systemic Findings at TSO Facilities				
Criteria	Description	Number of Systemic Findings	Percent of TSO Systemic Findings	Percent of TSO Facilities
10Q10	Receiving inspection	6	7%	11%
10Q1	Initial and periodic evaluation of suppliers	4	5%	7%
15M1	Internal auditing program	4	5%	7%
4P4	Work instructions control manufacturing processes	3	3%	6%
4Q1	Inspection methods and plans	3	3%	6%
10Q2	Use of approved suppliers	3	3%	6%
11Q1	Control of nonconforming products	3	3%	6%
2E9	Technical data file	2	2%	4%
2C4	Data submittal for TSO changes	2	2%	4%
4E1	Accord with FAA-approved design data	2	2%	4%
4P5	Work instruction revision approval	2	2%	4%
4Q3	Issuance of inspection stamps	2	2%	4%
4Q5	Inspection records	2	2%	4%
5Q3	Accord with process specifications	2	2%	4%
11Q2	Permanent identification of scrap material	2	2%	4%
11Q4	Material review record generated	2	2%	4%
15M2	Feed-back to higher level management	2	2%	4%
17Q4	Mechanics/ repairmen directly in charge	2	2%	4%
1M6	Policies/ procedures availability	1	1%	2%
1E2	Engineering Manager identified	1	1%	2%
1Q4	Quality manual	1	1%	2%
2E1	Quality manual	1	1%	2%
2E8	Major/minor design changes	1	1%	2%
2C1	Minor design change approval	1	1%	2%

Criteria	Description	Number of Systemic Findings	Percent of TSO Systemic Findings	Percent of TSO Facilities
3BE2	Change documentation and approval	1	1%	2%
3BE3	Software problem reporting	1	1%	2%
3BE4	Software security	1	1%	2%
4M1	Operation within production limitations	1	1%	2%
4P7	Identification/ control of partially accepted parts	1	1%	2%
4Q2	Location of inspection stations	1	1%	2%
5Q2	Required qualifications/approvals	1	1%	2%
6Q1	Statistical sampling inspection plans	1	1%	2%
7P1	Appropriate measuring devices used	1	1%	2%
7Q1	Approval/inspection of tools and gauges	1	1%	2%
7Q3	Tool and gauge recall system	1	1%	2%
7Q6	Calibration and use in acceptable environment	1	1%	2%
7Q8	Use of personal gauges	1	1%	2%
7Q12	Calibration records	1	1%	2%
8E1	Test procedures/instructions established	1	1%	2%
8E2	Control of test procedure/instruction change	1	1%	2%
9Q1	Operator qualifications	1	1%	2%
9Q2	Operators performing within authorized limits	1	1%	2%
9Q4	Tanks and solutions checked	1	1%	2%
10E1	Control of supplier design and changes	1	1%	2%
10Q8	Verification of raw material	1	1%	2%
10Q11	Segregation of non- certified parts	1	1%	2%
11Q3	MRB established and operational	1	1%	2%

Criteria	Description	Number of Systemic Findings	Percent of TSO Systemic Findings	Percent of TSO Facilities
11Q5	Reinspection/ retest after rework/repair	1	1%	2%
11Q7	Corrective action monitored	1	1%	2%
12Q1	Prevention of part damage/ deterioration	1	1%	2%
12Q2	Special environmental controls	1	1%	2%
12Q4	Segregation of product in storage	1	1%	2%
12Q8	Conforming products packaged and shipped	1	1%	2%
14S5	Approval of service bulletins	1	1%	2%
14C3	Submittal of quality system data changes	1	1%	2%
14C4	Relocation of manufacturing facilities	1	1%	2%

Table 6. – Systemic Observations at TSO Facilities

Criteria	Description	Number of Systemic	Percent of TSO Systemic	Percent of TSO
		Observations	Observations	Facilities
2E1	Design change approval	1	14%	2%
2E2	Drawing control system	1	14%	2%
4P4	Work instructions control manufacturing processes	1	14%	2%
7Q6	Calibration and use in acceptable environment	1	14%	2%
10Q1	Initial and periodic evaluation of suppliers	1	14%	2%
11Q3	MRB established and operational	1	14%	2%
15M2	Feed-back to higher level management	1	14%	2%

Table 7. – Isolated Observation at TSO Facilities

Criteria	Description	Number of	Percent of TSO	Percent of
	_	Isolated	Isolated	TSO
		Observations	Observations	Facilities
7Q1	Approval/inspection of	4	24%	7%
	tools and gauges			
7Q12	Calibration records	2	12%	4%
1M5	Policy document review	1	6%	2%
2E3	Technical data change approval	1	6%	2%
2C1	Minor design change approval	1	6%	2%
4P5	Work instruction revision approval	1	6%	2%
4Q3	Issuance of inspection stamps	1	6%	2%
7Q11	Control of production tooling	1	6%	2%
8E1	Test procedures/instructions established	1	6%	2%
10Q2	Use of approved suppliers	1	6%	2%
12Q5	Identification of age control products	1	6%	2%
14S2	Record of service difficulties	1	6%	2%
17Q2	Operation within certificate privileges	1	6%	2%

Table 8. – CFR-Based Observations at TSO Facilities

Criteria	Description	Number of	Percent of TSO	Percent of
	•	CFR-Based	CFR-Based	TSO
		Observations	Observations	Facilities
8E1	Test procedures/	2	13%	4%
	instructions established			
10Q1	Initial and periodic	2	13%	4%
	evaluation of suppliers			
1Q4	Quality manual	1	6%	2%
1Q6	Corrective action	1	6%	2%
	required			
2E2	Drawing control system	1	6%	2%
2E8	Major/minor design	1	6%	2%
	changes			
2C1	Minor design change	1	6%	2%
	approval			
4P9	Completed product/part	1	6%	2%
	identification			
4Q2	Location of inspection	1	6%	2%
	stations			
6Q1	Statistical sampling	1	6%	2%
	inspection plans			
6Q5	SPC method established	1	6%	2%
10Q5	Flow down of technical	1	6%	2%
	and quality requirements			
10Q8	Verification of raw	1	6%	2%
	material			
10C1	Delegation of major	1	6%	2%
	inspection authority			

Table 9. – Systemic Findings at PC Facilities

Criteria	Description	Number of	Percent of PC	Percent of
Cincia	Description	Systemic	Systemic Findings	PC
		Findings	Systemic Findings	Facilities
5Q3	Accord with process	9	8%	30%
3 Q 3	specifications		070	3070
2E7	Design/Technical data	5	4%	17%
22,	document control		1,0	17,70
7Q1	Approval/inspection of	5	4%	17%
	tools and gauges			
11Q1	Control of	4	3%	13%
	nonconforming products			
4P2	Work instructions	3	3%	10%
	prepared			
4Q1	Inspection methods and	3	3%	10%
	plans			
4Q2	Location of inspection	3	3%	10%
	stations			
4Q3	Issuance of inspection	3	3%	10%
	stamps		_	
7Q12	Calibration records	3	3%	10%
10Q1	Initial and periodic	3	3%	10%
	evaluation of suppliers			1.0
10Q10	Receiving inspection	3	3%	10%
15M1	Internal auditing program	3	3%	10%
1Q4	Quality manual	2	2%	7%
2E1	Design change approval	2	2%	7%
2E2	Drawing control system	2	2%	7%
2E8	Major/minor design	2	2%	7%
451	changes	2	20/	70/
4E1	Accord with FAA-	2	2%	7%
4D1	approved design data	2	20/	70/
4P1 4P4	Change approval	2 2	2% 2%	7% 7%
4P4	Work instructions control	2	Δ%0	/%
4P5	manufacturing processes Work instruction revision	2	2%	7%
413	approval	2	Δ%	7 %
4P6	Familiarity with	2	2%	7%
410	specifications		2/0	/ /0
4Q5	Inspection records	2	2%	7%
4Q10	Inspection marking	2	2%	7%
7Q2	Instructions for	2	2%	7%
, 22	acceptance tooling		270	, , , ,
7Q7	Accuracy of	2	2%	7%
,	inspection/test equipment	_	_,,	. , ,
L	T	I .	I.	L

Criteria	Description	Number of Systemic Findings	Percent of PC Systemic Findings	Percent of PC Facilities
7Q9	Control of special processing equipment	2	2%	7%
7Q11	Control of production tooling	2	2%	7%
9E2	Control of NDI processes & changes	2	2%	7%
9Q3	NDI procedures/ specifications available and used	2	2%	7%
11Q2	Permanent identification of scrap material	2	2%	7%
11Q3	MRB established and operational	2	2%	7%
1M5	Policy document review	1	1%	3%
1Q3	Quality Assurance manager identified	1	1%	3%
3AE1	Software Configuration Management Plan	1	1%	3%
3BE1	Software Configuration Management Plan	1	1%	3%
3BQ1	Verification prior to use	1	1%	3%
4M1	Operation within production limitations	1	1%	3%
4P3	Work instructions reflect tech data	1	1%	3%
4Q12	Completion of all inspections and tests	1	1%	3%
5Q2	Required qualifications/approvals	1	1%	3%
5Q5	Action on process out of control	1	1%	3%
6Q1	Statistical sampling inspection plans	1	1%	3%
7Q3	Tool and gauge recall system	1	1%	3%
7Q6	Calibration and use in acceptable environment	1	1%	3%
7Q14	Identification of gauges	1	1%	3%
7Q18	Action on product measured by SOT gauge	1	1%	3%
8E3	Approved flight checkoff form	1	1%	3%

Criteria	Description	Number of Systemic Findings	Percent of PC Systemic Findings	Percent of PC Facilities
8P1	Manufacturing review of test instructions	1	1%	3%
8Q5	Post-test teardown inspection and retest	1	1%	3%
8C1	Approval of flight test procedures	1	1%	3%
9Q1	Operator qualifications	1	1%	3%
10Q5	Flow down of technical and quality requirements	1	1%	3%
10Q6	Control of supplier design and changes	1	1%	3%
10Q7	Action on problem notification	1	1%	3%
11Q6	Corrective action required	1	1%	3%
11Q7	Corrective action monitored	1	1%	3%
12Q2	Special environmental controls	1	1%	3%
12Q5	Identification of age control products	1	1%	3%
13C3	Cancellation of certifications for passed title	1	1%	3%
14S2	Record of service difficulties	1	1%	3%
15M2	Feed-back to higher level management	1	1%	3%
17Q2	Operation within certificate privileges	1	1%	3%

Table 10. – Systemic Observations at PC Facilities

Criteria	Description	Number of Systemic	Percent of PC Systemic	Percent of PC
		Observations	Observations	Facilities
1M5	Policy document review	1	25%	3%
5E1	All special processes in use identified	1	25%	3%
8E5	Flight safety program	1	25%	3%
11Q5	Reinspection/ retest after rework/repair	1	25%	3%

Table 11. – Isolated Observation at PC Facilities

Criteria	Description	Number of	Percent of PC	Percent of
Criteria	Description	Isolated	Isolated	PC
		Observations	Observations	Facilities
4P2	Work instructions	4	7%	13%
	prepared			
5Q3	Accord with process	4	7%	13%
	specifications			
4Q5	Inspection records	3	5%	10%
11Q1	Control of	3	5%	10%
	nonconforming products			
12Q5	Identification of age	3	5%	10%
	control products			
4P3	Work instructions reflect	2	3%	7%
	tech data			
4P9	Completed product/part	2	3%	7%
	identification			
10Q2	Use of approved	2	3%	7%
	suppliers			
12Q7	Control of product	2	3%	7%
	removal/issuance	_	_	
15M1	Internal auditing program	2	3%	7%
2E7	Design/Technical data	1	2%	3%
	document control			_
2E8	Major/minor design	1	2%	3%
	changes			221
2E9	Technical data file	1	2%	3%
3AE5	Software security	1	2%	3%
3BE4	Software security	1	2%	3%
4E1	Accord with FAA-	1	2%	3%
450	approved design data		201	201
4E2	New/changed process	1	2%	3%
454	test substantiation	1	20/	20/
4P4	Work instructions control	1	2%	3%
400	manufacturing processes	1	20/	20/
4Q2	Location of inspection	1	2%	3%
402	stations	1	20/	20/
4Q3	Issuance of inspection	1	2%	3%
106	stamps Cleaners, solvents, etc.	1	2%	3%
4Q6	identified	1	∠ 70	370
4Q10	Inspection marking	1	2%	3%
5Q2	Required	1	2%	3%
3Q2	qualifications/approvals	1	∠ 70	370
6Q1	Statistical sampling	1	2%	3%
1 001	inspection plans	1	∠ /0	3 /0
	mspection plans			

Criteria	Description	Number of Isolated Observations	Percent of PC Isolated Observations	Percent of PC Facilities
6Q11	Additional inspection during corrective action	1	2%	3%
7Q1	Approval/inspection of tools and gauges	1	2%	3%
7Q3	Tool and gauge recall system	1	2%	3%
7Q11	Control of production tooling	1	2%	3%
7Q14	Identification of gauges	1	2%	3%
8E1	Test procedures/instructions established	1	2%	3%
8E3	Approved flight checkoff form	1	2%	3%
9Q1	Operator qualifications	1	2%	3%
9Q2	Operators performing within authorized limits	1	2%	3%
10Q1	Initial and periodic evaluation of suppliers	1	2%	3%
10Q8	Verification of raw material	1	2%	3%
10Q10	Receiving inspection	1	2%	3%
11Q2	Permanent identification of scrap material	1	2%	3%
11Q3	MRB established and operational	1	2%	3%
11Q4	Material review record generated	1	2%	3%
11Q7	Corrective action monitored	1	2%	3%
12Q2	Special environmental controls	1	2%	3%
12Q4	Segregation of product in storage	1	2%	3%

Table 12. – CFR-Based Observations at PC Facilities

Criteria	Description	Number of CFR-Based Observations	Percent of PC CFR-Based Observations	Percent of PC Facilities
1Q1	Quality organization described	1	33%	3%
3BE2	Change documentation and approval	1	33%	3%
8E3	Approved flight checkoff form	1	33%	3%

Table 13. – Systemic Findings at PMA Facilities

G '4 '	Table 13. – Systemi			D 4 6
Criteria	Description	Number of Systemic Findings	Percent of PMA Systemic Findings	Percent of PMA Facilities
4P9	Completed product/part identification	13	14%	6%
4Q1	Inspection methods and plans	9	10%	4%
5Q3	Accord with process specifications	7	7%	3%
10Q1	Initial and periodic evaluation of suppliers	7	7%	3%
11Q2	Permanent identification of scrap material	5	5%	2%
2E7	Design/Technical data document control	4	4%	2%
10Q10	Receiving inspection	4	4%	2%
11Q1	Control of nonconforming products	4	4%	2%
2E2	Drawing control system	3	3%	1%
4M1	Operation within production limitations	3	3%	1%
10Q8	Verification of raw material	3	3%	1%
1Q5	Tags, forms, etc. defined	2	2%	1%
2C1	Minor design change approval	2	2%	1%
2C2	Major design change approval	2	2%	1%
10Q5	Flow down of technical and quality requirements	2	2%	1%
12Q5	Identification of age control products	2	2%	1%
2E6	Storage of design documents	1	1%	0.5%
2E8	Major/minor design changes	1	1%	0.5%
4E1	Accord with FAA- approved design data	1	1%	0.5%
4P2	Work instructions prepared	1	1%	0.5%
4Q3	Issuance of inspection stamps	1	1%	0.5%
4Q5	Inspection records	1	1%	0.5%
4Q8	Traceable components identified	1	1%	0.5%

Criteria	Description	Number of Systemic Findings	Percent of PMA Systemic Findings	Percent of PMA Facilities
4Q10	Inspection marking	1	1%	0.5%
4Q12	Completion of all inspections and tests	1	1%	0.5%
5E1	All special processes in use identified	1	1%	0.5%
5Q1	Equipment available and calibrated	1	1%	0.5%
5Q4	Records maintained	1	1%	0.5%
7Q3	Tool and gauge recall system	1	1%	0.5%
7Q6	Calibration and use in acceptable environment	1	1%	0.5%
7Q11	Control of production tooling	1	1%	0.5%
8E1	Test procedures/instructions established	1	1%	0.5%
10Q2	Use of approved suppliers	1	1%	0.5%
11Q4	Material review record generated	1	1%	0.5%
12Q1	Prevention of part damage/ deterioration	1	1%	0.5%
15M1	Internal auditing program	1	1%	0.5%

Table 14. – Systemic Observation at PMA Facilities

	Table 14. – Systemic Observation at PMA Facilities					
Criteria	Description	Number of	Percent of PMA	Percent of		
		Systemic	Systemic	PMA		
		Observations	Observations	Facilities		
4Q5	Inspection records	9	7%	4%		
10Q1	Initial and periodic	8	6%	4%		
	evaluation of suppliers					
7Q1	Approval/inspection of	6	4%	3%		
	tools and gauges					
10Q2	Use of approved	6	4%	3%		
	suppliers					
15M1	Internal auditing program	6	4%	3%		
10Q8	Verification of raw	5	4%	2%		
	material					
11Q1	Verification of raw	5	4%	2%		
	material					
2E2	Drawing control system	4	3%	2%		
2E7	Design/Technical data	4	3%	2%		
	document control					
4P4	Work instructions control	4	3%	2%		
	manufacturing processes					
4Q3	Issuance of inspection	4	3%	2%		
	stamps					
10Q12	Records of receiving	4	3%	2%		
	inspection					
4Q1	Inspection methods and	3	2%	1%		
	plans					
7Q3	Tool and gauge recall	3	2%	1%		
	system					
7Q12	Calibration records	3	2%	1%		
10Q5	Flow down of technical	3	2%	1%		
	and quality requirements					
12Q3	Storage of conforming	3	2%	1%		
	parts					
12Q5	Identification of age	3	2%	1%		
	control products					
1M5	Policy document review	2	1%	1%		
1Q4	Quality manual	2	1%	1%		
4P2	Work instructions	2	1%	1%		
	prepared					
4P9	Completed product/part	2	1%	1%		
	identification					
4Q12	Completion of all	2	1%	1%		
	inspections and tests					
5Q3	Accord with process	2	1%	1%		
	specifications					

Criteria	Description	Number of	Percent of PMA	Percent of
	_	Systemic	Systemic	PMA
		Observations	Observations	Facilities
7Q2	Instructions for	2	1%	1%
	acceptance tooling			
7Q6	Calibration and use in	2	1%	1%
	acceptable environment			
7Q14	Identification of gauges	2	1%	1%
10Q6	Control of supplier	2	1%	1%
	design and changes			
10Q10	Receiving inspection	2	1%	1%
11Q2	Permanent identification	2	1%	1%
	of scrap material			
11Q6	Corrective action	2	1%	1%
	required			
1M1	Overall policy document	1	1%	0.5%
1Q2	Quality Assurance	1	1%	0.5%
	Manager identified			
1Q3	Quality Assurance staff	1	1%	0.5%
	qualifications			
1Q7	Record analysis	1	1%	0.5%
1S1	Service/Product support	1	1%	0.5%
	organization described			
2E3	Technical data change	1	1%	0.5%
25.6	approval	4	4.07	0.70/
2E6	Storage of design	1	1%	0.5%
201	documents	1	10/	0.70/
2C1	Minor design change	1	1%	0.5%
2 4 5 2	approval	1	10/	0.50/
3AE3	Software problem	1	1%	0.5%
3BE2	reporting Change de symantation	1	10/	0.50/
3DE2	Change documentation	1	1%	0.5%
4E1	and approval Accord with FAA-	1	1%	0.5%
41.1	approved design data	1	1 70	0.5%
4P3	Work instructions reflect	1	1%	0.5%
41 3	tech data	1	1 70	0.570
4P7	Identification/control of	1	1%	0.5%
71 /	partially accepted parts	1	1 /0	0.570
4Q9	Completed product/part	1	1%	0.5%
'\\	identification	1	1/0	0.570
5Q2	Required	1	1%	0.5%
522	qualifications/approvals	1	1/0	0.070
7Q4	Traceability to national/	1	1%	0.5%
	international standards		270	0.0 /0
L		1	<u>l</u>	

Criteria	Description	Number of Systemic Observations	Percent of PMA Systemic Observations	Percent of PMA Facilities
7Q11	Control of production tooling	1	1%	0.5%
7Q19	Tool and gauge rework/ inspection	1	1%	0.5%
8E1	Test procedures/ instructions established	1	1%	0.5%
9Q2	Operators performing within authorized limits	1	1%	0.5%
9Q9	Records of compliance	1	1%	0.5%
10Q4	Control of buyer- furnished material	1	1%	0.5%
10Q11	Segregation of non- certified parts	1	1%	0.5%
10C2	New suppliers/first articles	1	1%	0.5%
11Q4	Material review record generated	1	1%	0.5%
13E1	AD incorporation	1	1%	0.5%
14S3	Investigative/corrective action	1	1%	0.5%

Table 15. – Isolated Observation at PMA Facilities

Description	Name have of	Domoont of DMA	Damagn4 of
Description			Percent of
			PMA Facilities
A 1 '41			Facilities
· •	4	8%	2%
	4	00/	20/
	4	8%	2%
		40/	10/
			1%
l -	2	4%	1%
-			
	2	4%	1%
_	2	4%	1%
1			
			1%
_ *	2	4%	1%
inspections and tests			
Records maintained	2	4%	1%
Control of special	2	4%	1%
processing equipment			
Inaccurate tools and	2	4%	1%
gauges identified			
Policies/ procedures	1	2%	0.5%
availability			
Quality Assurance	1	2%	0.5%
Manager identified			
Quality Assurance staff	1	2%	0.5%
qualifications			
Quality manual	1	2%	0.5%
Design change approval	1	2%	0.5%
0 0 11	1	2%	0.5%
document control			
	1	2%	0.5%
	1	2%	0.5%
			0.5%
1 1	1	2%	0.5%
	_	_,~	
	1	2%	0.5%
	_	_,~	
	1	2%	0.5%
			0.5%
tools and gauges	1	270	0.570
	Control of special processing equipment Inaccurate tools and gauges identified Policies/ procedures availability Quality Assurance Manager identified Quality Assurance staff qualifications Quality manual Design change approval Design/Technical data document control Change documentation and approval Change approval Work instructions prepared Work instructions reflect tech data Work instructions control manufacturing processes Traceability for split lots Approval/inspection of	Accord with process specifications Control of nonconforming products Tags, forms, etc. defined 2 Familiarity with specifications Completed product/part identification Inspection methods and plans Inspection records 2 Completion of all inspections and tests Records maintained 2 Control of special processing equipment Inaccurate tools and gauges identified Policies/ procedures availability Quality Assurance Manager identified Quality Assurance staff qualifications Quality manual 1 Design Change approval 1 Design/Technical data document control Change documentation and approval Change approval Change approval Change approval Change approval Work instructions reflect tech data Work instructions control manufacturing processes Traceability for split lots Approval/inspection of 1	Accord with process specifications Control of nonconforming products Tags, forms, etc. defined 2 4% Familiarity with specifications Completed product/part identification Inspection methods and plans Inspection records 2 4% Completion of all inspections and tests Records maintained 2 4% Control of special processing equipment Inaccurate tools and gauges identified Policies/ procedures availability Quality Assurance Manager identified Quality Assurance staff qualifications Quality manual 1 2% Quality manual 1 2% Quality manual 1 2% Quality manual 1 2% Design change approval 1 2% Work instructions reflect tech data Work instructions control manufacturing processes Traceability for split lots Approval/inspection of 1 2% Approval/inspection of

Description	Number of Isolated	Percent of PMA Isolated	Percent of PMA
			Facilities
Tool and gauge recall	1	2%	0.5%
Control of production	1	2%	0.5%
tooling			
Identification of gauges	1	2%	0.5%
Control of test procedure/	1	2%	0.5%
instruction change			
NDI procedures/	1	2%	0.5%
specifications available			
and used			
Use of approved	1	2%	0.5%
Verification of raw	1	2%	0.5%
material			
Verification of shelf-life	1	2%	0.5%
materials			
Records of receiving	1	2%	0.5%
inspection			
Special environmental	1	2%	0.5%
controls			
Identification of age	1	2%	0.5%
	1	2%	0.5%
	1	2%	0.5%
	Tool and gauge recall system Control of production tooling Identification of gauges Control of test procedure/ instruction change NDI procedures/ specifications available and used Use of approved suppliers Verification of raw material Verification of shelf-life materials Records of receiving inspection Special environmental	Tool and gauge recall system Control of production tooling Identification of gauges Control of test procedure/ instruction change NDI procedures/ specifications available and used Use of approved suppliers Verification of raw material Verification of shelf-life materials Records of receiving inspection Special environmental controls Identification of age control products Submittal of quality system data changes Export airworthiness I at solated Observations 1 toolservations 1 tooling 1	Isolated Observations

Table 16. – CFR-Based Observations at PC Facilities

Criteria	Description	Number of	Percent of PMA	Percent of
01100110	2 0001-1011	CFR-Based	CFR-Based	PMA
		Observations	Observations	Facilities
4E1	Accord with FAA-	4	17%	2%
	approved design data			
2E2	Drawing control system	3	13%	1%
2E1	Design change approval	2 2	9%	1%
2E4	AD incorporation into design	2	9%	1%
1Q6	Record retention schedule	1	4%	0.5%
1C1	Notification organization described	1	4%	0.5%
2E5	Changes to instructions for Continued Airworthiness	1	4%	0.5%
2E8	Major/minor design changes	1	4%	0.5%
2S2	Distribution of Inst. For Continued Airworthiness changes	1	4%	0.5%
2C1	Minor design change approval	1	4%	0.5%
5E1	All special processes in use identified	1	4%	0.5%
6Q1	Statistical sampling inspection plans	1	4%	0.5%
10Q1	Initial and periodic evaluation of suppliers	1	4%	0.5%
11Q6	Corrective action required	1	4%	0.5%
13E1	AD incorporation	1	4%	0.5%
14C1	Failure reporting	1	4%	0.5%